

National Transportation Safety Board  
Washington, DC 20594

Brief of Accident

Adopted 04/01/2003

DEN02LA081		07/24/2002		Two Buttes, CO		Aircraft Reg No. N5416		Time (Local): 07:45 MDT					
Make/Model:		Grumman / G-164A				Fatal		Serious		Minor/None			
Engine Make/Model:		Pratt & Whitney / R1340				Crew		0		0		1	
Aircraft Damage:		Substantial				Pass		0		0		0	
Number of Engines:		1											
Operating Certificate(s):		None											
Type of Flight Operation:		Aerial Application											
Reg. Flight Conducted Under:		Part 137: Agricultural											
Last Depart. Point:		Same as Accident/Incident Location				Condition of Light:		Day					
Destination:		Local Flight				Weather Info Src:		Weather Observation Facility					
Airport Proximity:		On Airport				Basic Weather:		Visual Conditions					
Airport Name:		Doyle's Airfield				Lowest Ceiling:		None					
Runway Identification:		180				Visibility:		10.00 SM					
Runway Length/Width (Ft):		2640 / 60				Wind Dir/Speed:		190 / 010 Kts					
Runway Surface:		Grass/turf				Temperature (°C):		24					
Runway Surface Condition:		Dry				Precip/Obscuration:		None / None					
Pilot-in-Command		Age: 36				Flight Time (Hours)							
Certificate(s)/Rating(s)						Total All Aircraft:		1700					
Commercial; Single-engine Land						Last 90 Days:		140					
Instrument Ratings						Total Make/Model:		300					
None						Total Instrument Time:		UnK/Nr					

The pilot said that he was landing with a load of herbicide. During the landing roll, the airplane started to veer to the left. The pilot said he applied right rudder and right brake, but the airplane did not respond. The airplane ground looped to the left, and the right main landing gear separated from the airplane. He said all four wings appeared wrinkled, but the lower right wing was bent up. Postaccident investigation of the right brake revealed that its master brake cylinder had failed.

Brief of Accident (Continued)

DEN02LA081  
File No. 12755                      07/24/2002                      Two Buttes, CO                      Aircraft Reg No. N5416                      Time (Local): 07:45 MDT

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Occurrence #1:     AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - FAILURE

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Occurrence #2:     LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

Findings

2. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Findings Legend: (C) = Cause, (F) = Factor

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The National Transportation Safety Board determines the probable cause(s) of this accident as follows.  
the failure of the right main landing wheel master brake cylinder and the subsequent inadvertent ground loop during the landing roll by the pilot.